



Many Voices Working for the Community

Oak Ridge Site Specific Advisory Board

May 21, 2002

Mr. Gerald Boyd
Assistant Manager for Environmental Management
DOE-Oak Ridge Operations
P.O. Box 2001, EM-90
Oak Ridge, TN 37831

Dear Mr. Boyd:

**Recommendations on Accelerated Disposition of Legacy Low-Level Waste
at the U.S. Department of Energy's Oak Ridge Reservation**

At our May 8, 2002, meeting, the Oak Ridge Site Specific Advisory Board approved the enclosed recommendations.

We appreciate your consideration of our recommendations and look forward to receiving your written response.

Sincerely,

A handwritten signature in cursive script that reads "Luther V. Gibson, Jr.".

Luther V. Gibson, Jr.
Chair

Enclosure

cc/enc: Pat Halsey, DOE-ORO
Connie Jones, EPA Region 4
Bill McMillan, DOE-ORO
John Owsley, TDEC



Oak Ridge Site Specific Advisory Board Recommendations on Accelerated Disposition of Legacy Low-Level Waste at the U.S. Department of Energy's Oak Ridge Reservation

BACKGROUND

In March 2002, the U.S. Department of Energy (DOE) Oak Ridge Operations Office submitted its *DOE-Oak Ridge Top-to-Bottom Review Comprehensive Closure Proposal* to DOE-Headquarters. The proposal identifies two projects for accelerated closure at the Oak Ridge Reservation: the East Tennessee Technology Park and Melton Valley. Accelerated disposition of legacy low-level (radioactive) waste (LLW) is included as part of the proposal for these sites because disposition of these wastes is integral to the closure projects.

The Oak Ridge Site Specific Advisory Board (ORSSAB) discussed the legacy LLW aspects of the proposal and formulated the following recommendations.

DISCUSSION

At currently proposed funding levels, completion of legacy LLW disposition will not be accomplished until FY 2011. Under the Comprehensive Closure Proposal, disposition would be complete by the end of FY 2004 at a total cost savings of \$34M. These savings would result from efficiencies achieved by disposing of approximately 60% of legacy LLW in the Environmental Management Waste Management Facility (EMWMF) and through greatly reduced storage costs resulting from accelerated disposition. The remaining 40% of legacy LLW stored on the Oak Ridge Reservation will be sent to a permitted/licensed offsite disposal location.

One difficulty with the plan is that the waste must receive legal reclassification so that it meets the definition of "Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) generated waste," which according to the EMWMF Record of Decision, is the only waste type that may be accepted at the facility. According to DOE, the agency has developed a legal opinion that supports disposition of some legacy LLW under CERCLA criteria due to an "imminent threat of release of the material into the environment." EPA and the State of Tennessee have tentatively accepted this argument. The legacy LLW identified in this opinion is only that material stored outside buildings prior to September 30, 2000. These wastes include dry active waste, scrap metal, debris, soils, residues, and some classified material.

In addition to the projected cost savings of \$34M, accelerating disposition of legacy LLW by 7 years will reduce the transportation risk that would have been associated with shipping 60% of the waste to NTS (an estimated 2.6M truck miles), and it will reduce the risk associated with outdoor storage of the material. And while 60% of legacy LLW will be interred in EMWMF, only 1% of the estimated

curies contained in the legacy material will be disposed there; the more heavily radioactive LLW will be shipped offsite. The legacy wastes would amount to less than 2% of the total volume expected at EMWMF over the life cycle baseline, and disposition of the legacy material at EMWMF would amount to a very small addition to the overall curie loading at EMWMF.

RECOMMENDATIONS

ORSSAB recommends that DOE pursue reclassification of outdoor-stored legacy LLW waste as “CERCLA-generated waste” for the purpose of disposing this material at EMWMF. ORSSAB supports the proposed dispositioning of legacy LLW as spelled out in the Comprehensive Closure Proposal and with disposing outdoor-stored legacy LLW at EMWMF, assuming the material meets the waste acceptance criteria set for the facility. ORSSAB agrees with DOE that this will result in the most expeditious disposal of the material and that it will result in a considerable cost savings to the public.